

BARG Newsletter December 2025



***Ballarat Amateur Radio Group Inc. #6953T
December 2025 Monthly Newsletter***

**Next Meeting
Saturday 31st of January 2026 10:00AM
At the Airport - All Welcome**



Contacting us
BARG@BARG.ORG.AU

We're on the web.

www.barg.org.au

https://twitter.com/vk3_barg

<https://www.facebook.com/groups/VK3BML/>



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Front Page; Father Christmas is on the way.

Times and dates of nets as below

Club Nets: VHF NET: Every Tuesday Night at 8 pm on 146.750 MHz - VK3RBA

HF NET: Every Thursday Night at 8 pm on 3.608 MHz - VK3BML

6m NET: Every Tuesday Night at 8:30 pm on 53.650Mhz RX / 52.650Mhz TX - FM
with a 91.5 tone - VK3RWU

LINKED REPEATERS: *The local VK3RBA-70cm repeater on Mt Buninyong is part of a network of linked repeaters covering North-Western Victoria.*

Access details for this repeater have recently changed.

*For full details of this linked network and access details
see <https://www.qrz.com/lookup/vk3rba>*

You can listen to the system live <http://vk3rba.dyndns.org:441/>

This linked system may be accessed via IRLP node 9503

BARG inc. OFFICE BEARERS

President	Vacant	Ordinary Member	Tom George VK3DMK
Vice President	Colin Consiglio VK3NCC	Ordinary Member	Ian Fairweather VK3YFD
Secretary	Peter Westgarth VK3APW	Ordinary Member	Doug Ellery VK3DRE
Treasurer	Jeff Rickerby VK3JHR	Ordinary Member	David Martin VK3KQT
Ordinary Member	Craig Cook VK3KG	Ordinary Member	Ben Daniel VK3NRD



The VP's Ramblings.



Greetings everyone,

It's the last month of the year, and what a year it has been. Still no Hot Cross buns on the horizon. Shall we run a sweep as to when these will be sighted?

The coffee morning gatherings at the club rooms have been well patronised. Food Seduction, "thankyou "for supporting our meetings over the past few years

At time of writing, Hamvention 2026 is less than 50 days away. The approaching silly season has slowed bookings but we're expecting an accelerated demand in January. If you are considering making some of your preloved gear available to others, now is the time to book a table. You'll find a clickable link on the front page of our web presence. (BARG.ORG.AU).

In the last month we welcomed David/VK3HSG to the club membership. We now have 59 members on the books.

How's your memory? This is what I can remember what's happened over the year:

1. **February:** Hamvention 2025, a great result and a lot of fun; Don't forget to volunteer to assist in February 2026.
2. **March:** John Moyle Field Day, a few attendees who had a lot of fun --- Will you commit in 2026? ...
3. **June:** We lost Ken/VK3VCW SK
4. **August:** AGM; availability of JAYCAR discount card, RD Contest now is the time to put 02026 into the diary, sadly lost Harry/VK3AHH SK
5. **September:** GF Auction, reasonable attendance, not a lot of quality sought after gear... a sign of the times., yummy Pumpkin soup, thank you to Chef Peter/APW
6. **October:** JOTA 2025, thank Ian/YFD, Peter/APW and John/JF for flying the flag
7. **November:** Mal/VK3OAK inducted as Life Member, Cliff Bilston VK3CB SK (PAST MEMBER)
8. **December:** Jpole and Copper tubing brazing/Silver Soldering demonstration, thanks Rick/FIVE; *Fantastic* response to the Christmas breakup dinner organised by Ian/AXH
9. Monthly dining experiences (thanks Ian/AXH)
10. Nice support of general meetings from membership.

Remember Hamvention 2026 will also need member support on the day to make it as successful as ever. An email has been sent to all members inviting your commitment. Please respond early so the committee can plan accordingly. It won't happen without you.

Cheers Colin VK3NCC Vice President

FreeDV

There has been some activity in the club with some hands-on demonstrations of FreeDV, HF digital voice.

If you want to listen or take part in a FreeDV contact, **after** the BARG 80m Net ,
[Every Thursday Night at 8 pm on 3.608 MHz - VK3BML](#)

A few stations have fired up FreeDV for a conversation, any amateur operating FreeDV is free to join and chat.

From Colin VK3NCC

Still the same almost 40years down the track from BARG NEWS 1986 June,

THE JOY OF BEING AN EDITOR.

Getting out this journal is no picnic, If we print jokes people say we are silly; If we don't they say we are too serious. If we snip things from other magazines, We are to lazy to write them ourselves.

If we don't, we are too fond of our own stuff.

If we stick close to our job all day,

We ought to be hunting up articles.

If we do it out and try to hustle,

We ought to be at our job in the office.

If we don't print contributions,

We don't appreciate true genius....

And if we print them the journal is filled with junk,

If we make a change in the wording of a contribution, we are too critical.

If we don't, we are asleep.

It is more likely that someone will say that we even sneaked this from some other magazine.

as a matter of fact, we DID.

The next BARG General Meeting Saturday 31st of January 2026 10:00AM

Youth Net on the Link System

14/12/25

VK4IKZ VK4PAA VK3TV VK4BNT VK3HJQ VK3VTV

7/12/25

VK3JFR VK4AHA VK4IKZ VK3BKO

30/11/25

VK3JFR VK3FTOM VK4AHA VK4BNT VK3HJQ
VK3BKO

23/11/25

VK3JFR VK4AHA VK1AAK VK3BKO/P VK3WOGVK4IKZ

16/11/25

VK3JFR VK4AHA VK1AAK VK3VSN VK3HJQ VK4IKZ VK4MCW VK3XEM



BARG 2026 HAMVENTION

BALLARAT AMATEUR RADIO GROUP 2026 Hamvention Sunday 1st February 2026

Bring, Buy, Swap, and Sell Amateur Radio based equipment.

Ballarat Polo-Crosse Club's Facility, 207 Airport Road, Ballarat Airport.

Deadline for table bookings, 5:00pm, Thursday 22nd January 2026 or unless all allocated.



This space needs some content!!!!

Anything, no matter how small or big, educational, technical, humorous, historical or hysterical.

The editor Tom VK3DMK tomvk3dmk@gmail.com

MY – HOW A SHACK CAN GROW!

Contributor: Robert VK3ARM.

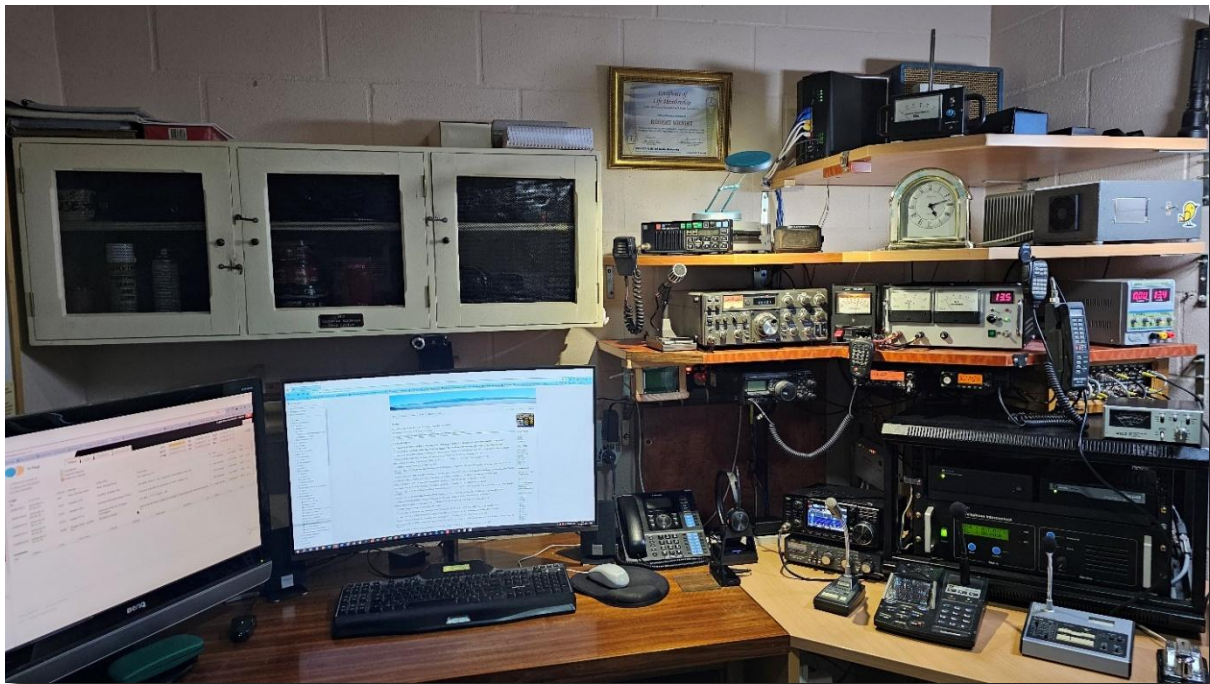
Here's my Shack as it was back in 2009.

I still have the roll top student desk.

That was a birthday present from my parents when I first started secondary school.

Internet was unreliable, 3G Wireless and my antennas were a fan dipole for 40 and 80. I had a vertical 80/10m antenna out the back of my home, just 80, 40, 20, 15 and 10. At the top of my Hills Mast was a high gain 2/70 vertical. Still have that vertical.

Forward to late last year and My! How things have changed. There's too much here to cover so the picture will tell the story. Antennas are also a 'plenty but there's nothing above 70cm. Internet is NBN Wireless, way,



way faster and more reliable than the old 3G Clunker.

Antennas have grown considerably.

My antenna Patch Panel was built in what was the bottom drawer of my roll-top desk.

The top row BNCs are all antennas while the bottom row is rig outputs with the exception of the BNC on the far right. It's the dummy load.

Cheers Robert VK3ARM

You-Tube Video – Receiving Better with Jarrod VK3BL

How to Setup Your Receiver for Optimal Performance



I was watching a You Tube Video from Jarrod VK3BL recently. In response to one of his fans' request Jarrod explained why running a rig's receiver with essentially 'All Knobs To the Right' is not a good idea if you want good quality reception.

I've seen this many times with visiting other Amateurs who seem to have this bad habit.

In Jarrod's words, "*Rob Sherwood points out that many Hams are not comfortable with using the RF Gain and Attenuator features, even though these features are essential to get the most out of modern SDR Radios and even Boat Anchors such as the Yaesu FT-101E.*

We discuss how and when to use the Attenuator and RF Gain controls so that the band noise doesn't trigger the AGC function of the receiver, and how to ensure you're making the most of your receiver's dynamic range."

Definitely worth a look.

<https://www.youtube.com/watch?v=En86CBBm030>

Cheers... Robert VK3ARM

PS: I thought I'd add this little image, just for fun. Reminds me that I'm still recovering from going Base over Apex at the local Men's Shed in mid-November.



**I SEE PEOPLE MY AGE OUT THERE
CLIMBING MOUNTAINS AND ZIP LINING.
AND HERE I AM FEELING GOOD ABOUT
MYSELF BECAUSE I GOT MY LEG THROUGH
MY UNDERWEAR WITHOUT LOSING
MY BALANCE**

BARG In Review 2025















Play your part!!

Join today!

Community Service

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Bookshop

Publications

Technical Services



WIRELESS INSTITUTE OF AUSTRALIA ABN 36 004 820 745
Phone (03) 9729 0400
Email nationaloffice@wia.org.au

MEMBERSHIP APPLICATION

Send to **WIA Membership**
PO Box 2042
Bayswater VIC 3153

Mr/Mrs/Ms

Given Names

Family Name

Preferred Name

Street Address

City/Town State Postcode Country

Callsign Date of Birth dd/mm/yyyy

Occupation

Tick which period and fee.

Membership	☐ 1 year	☐ 5 year
Member	☐ \$95	☐ \$451
Overseas Member	☐ \$105	☐ \$500
Concession Member*	☐ \$80	☐ \$380
Student**	☐ \$35	
Additional Family Member***	☐ \$36	

* Please provide pension health benefits card number.

** Please provide evidence below of being a full-time student.

*** Please provide name and callsign of primary family member residing at the same address.

Provide concession details

.....

.....

Home Telephone

Work Telephone (optional)

Mobile Telephone (optional)

Email Address

I apply for membership of the Wireless Institute of Australia and agree to be bound by its constitution (available on the WIA Website).

I enclose ☐ Cash ☐ Cheque or ☐ Money Order for \$

or authorise payment of \$ by way of debit

to my ☐ MasterCard ☐ Visa Credit Card

CVC

Card No.

Expiry Date ____/____ Name on Card

Signature of Applicant Date ____/____

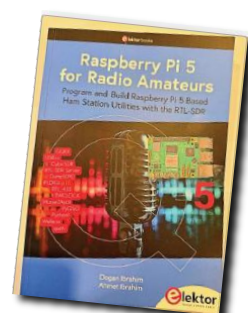
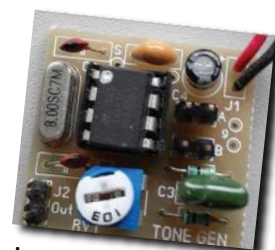
Magazine Reviews

Amateur Radio Review Vol 93 No 6 2025

- P4 Editorial. Roger VK2ZRH. The state of the hobby and its future.
- P5 Your WIA. Grant VK5GR. The overhaul of our amateur frequency bands.
- P6 MARS – a no-go on-air for Australian amateurs. How MARS works and its not for us.
- P10 WIA News. Summit Event May 2026, Albury. WIA Website refresh. QTECH2025 Report. 2027 World Radio Conference. QTech2025 conference a first-time success. Last print edition for World Radio TV Handbook. Chipmakers advance SDR technology with AI.
- P12 Amateur radio sport. Fun, exciting, and global! Jack Bramham VK3WWW, WIA ARDF Coordinator. Report on the World ARDF Championships organised by the IARU.
- P15 The salutary tale of a club's remote HF station. BDARS Club members. Construction and installation of the Bayside District Amateur Radio Society remote HF station at Mt Cotton.
- P19 Experiencing HAM RADIO 2025 – Messe Friedrichshafen, Germany. Greg Mew VK4GRM. A visit to the 48th International Amateur radio Exhibition. The displays, the lectures and meeting with other like-minded people.
- P23 Wagga ARC and the Hume and Hovell Ultra Marathon – a successful collaboration Lewis and Noeline Blume, VK2LBL and VK2GNM. The participation of the Wagga ARC in providing comms in a part of the ultra-marathon events. Tracing the route of Hume and Hovell, bit of Australian History, and consisting of a number of different marathon events the article goes through the planning and co-ordination required to successfully provide links to various points of the course.
- P27 Build this “digital dial” for your boat anchor rig. Jim Tregellas VK5JST. A homebrew digital frequency display for you analog transceiver. Just a simple connection into your rigs antenna system and you have a convenient readout of your RF carrier to check your rigs dial calibration.
- P31 Contesting. Roger Harrison VK2ZRH - VHF-UHF Field Days Contest Manager vk2zrh@wia.org.au. Changes under way for VHF – UHF μ Waves. A list of dates for the upcoming Field days.
- P34 The 2026 Contest Calendar Lift-out. This annual calendar of contests popularly patronised in Australia (E&OE) has been prepared and provided by Alan Shannon VK4SN, WIA Contest Committee Chairman. All times are in UTC. Alan publishes his contest calendar annually on his website: www.vk4sn.com/Contests/Calendar.



- P36 Installing a CTCSS card in your Kenwood TR-7400A. Greg Mew VK4GRM. Installing CTCSS in a vintage 1970's 2m transceiver using ZL2PD CTCSS Tone Encoder Module.
- P42 The time has come for digital voice on the HF bands. Peter Marks VK3TPM. FreeDV, a very concise and interesting article on this upcoming mode that needs only basic computer hardware and the free software that is very well documented and continually upgraded. Allowing voice communications over very noisy bands with low power it is becoming a very popular mode in the current urban HF noise levels.
- P49 Op-Ed. Every amateur has to keep records of their station EMR compliance, but . . . RF exposure limits. Is this another. 'Hall of Doom'? Dr George Galanis VK3EIP. A look and feel for the equations used to calculate EMR radiation levels and the ACMA documentation on the subject.
- P55 Trade Showcase. Roger Harrison VK2ZRH. Dummy Loads and the RigExpert MATCH antenna and cable analyser price drop announced.
- P56 ALARA. Norma O'Hare, VK2YL publicity@alara.org.au www.alara.org.au. Repurposed 'Retro CB Caddy' by Carmel VK2CAR, VK2NO. Shirley's track. Kirsti VK9YL SK. 2025 ALARA Contest report. Hannah VK2HSC. YLs help with communications. Committee update.
- P59 Below 25. Young people on the air with Alec Cherry VK2MV. The year in review. Gaining amateur radio experience.
- P60 WestNews. Will McGhie VK6UU. will2@iinet.net.au. A follow up from Steve VK6ST. New 23cm repeater for Perth.
- P62 Book Review. Raspberry Pi 5 for radio amateurs. John Gieroszynski VK1JG. For those interested in getting into the Pi revolution and integrating it into their amateur radio station, this might be the book.
- P63 WIA DX Awards, Marc Hillman VK3OHM/VK3IP. Below are listed all New DX Awards issued from 2025-08-30 to 2025-10-31.
- P64 2025 Remembrance Day Contest report. Alan Shannon, Contest Manager.



QST Review December 2025

Well another year has reached its conclusion [well nearly] and we start to look towards the new one to follow. Again over 100 pages along with adverts to coax any amateur's juices to flow when hoping to see a new rig, or some better test equipment in the stocking this time. Or perhaps you just want to make something? Perhaps a six-meter beam array will interest or the construction ideas for another dual band J Pole vertical appeals?



- P9 ARRL CEO looks back on his five years as the CEO and wonders how the time has gone.

P13 Member spotlight Lindy Williams K6EB. Licenced somewhere back in 1965 and active for about four years and then choosing to enter the broadcast commercial industry and gaining his First-Class Radio telephone Operator licence. He worked as a DJ in the industry and finally retired as a Director of Lotus Communication s Corp.



Television and then teaching and writing have been his interests and now collects old radios, astronomy. An interesting life.

P17 While commercial it's about The New Noise Floor by Aurora of Flexradio. How to share the bands with noise and those stations that just crank up their power level to get through.

P24 Members Correspondence. Mainly about licencing system and some interesting remembrance of contacts long ago.

P30 Build a stacked 3 element over 3 element beam [Yagi] for 6m that won the 2024 QST Antenna design competition. Has an SWR of better than 1.2:1 over 50.00 to 50.4 MHz. and has max gain of 14.6dBi quoted.



P33 The Adjust-a-J Antenna, another effort to use the J antenna on two bands together and this one does not use the same matching method of the more common device. Traditionally the coax cable is tapped up from the earthy end of the quarter wave transmission line stub which approximates the coax cable impedance point on that line. In this case the inner of the coax is used as a wraparound CAPACITIVE CONTACT POINT ON THE LINE SECTION. Also, the centre feed is to the longest element i.e. the quarter wave section plus the length of the radiating half wave antenna.

NEED TO REVIEW CALCULATIONS AND UNITS,

P37 Review ELECRAFT KH1 QRP transceiver. A 5W CW only device to cover 40-30-20-17-15 M amateur bans. An ideal small pocket rig for field days, parks and other mobile activity sites, can use the whip antenna or connect to a hund piece of wire in the air. Has a BNC socket on the top



P42 VA6AM Engineering low power Triplexer and Band pass filters for 20/15/10M. come in four off the shelf aluminium boxes. And rated at 200W for the Triplexer but 150W on each BP filter unit. Copies of the swept freq response at www.arrl.org/qst-in-depth Distrib in US by DX Engineering for US\$282 for the Triplexer and US\$165 each of the BFP.

P46 Review DX Commander Classic 2 Vertical HF antenna. Suitable for a club FD covering 40 thru to 2Meters and has "optional" support for 60/80M. Made of fibre glass it weighs just 8 pounds and uses four-foot mast sections that allows a height of 32 feet. Article discusses needs for the ground radials and best-found results. Wire supplied for eight sets of 10-foot radials.

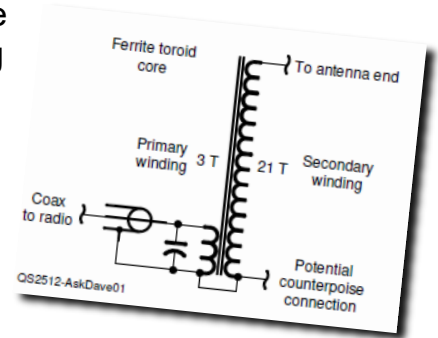


With all field day activities especially erecting an antenna like this it pays to know the layout angles and lengths for all pegs, guys, base plates etc. On set up a walk around layout is best done first and assists the pull up erection of the mast without mishaps.

RULE OF ORDER: Remember the SIX P's of any operation. If you're not familiar with them ask Craig sometime. Quoted time to erect is about 30mins initially but it's "one man operation" hi hi. From DX Commander in US

the Classic 2 Plus 80metres is USD 502 and the basic unit without the 80m option is USD 422,

- P49 Ask Dave looks at Antennas and Feed lines. See YouTube play list <https://bit.ly/3z2MBML> Interesting read on a number of different antennas in use and looks at a 49:1 UNUN transformer to feed a end fed half wave antenna [EFHW] and discusses why a S/c shows across the coax inside the shack and is the first step in the circuit analysis to ascertain performance. WARNING. Of course, the coax could be damaged and masking out the true condition at the UNUN.



- P51 My Quest for FT8 WAS and a DXCC on QRP. By Frank WS1MH. A fun way for
- P53 Anatomy of a POTA Rove by Marc W4MPS.
- P56 Celebrating IOTA -60 India+ Sixty years since IOTA started up.
- P86 Ham Media Playlist. EARTH MOON EARTH. Just one side to amateur radio activities. And if interested head on to one of the many YouTube sites such as www.youtube.com/@HamRadioConcepts by Eric KJ4YZI then look at GM8JBJ site with a club zoom project for the Mid Sussex Amateur radio society Also a well-known Australian operator is Haydn VK7HH and should watch his older presentation on EME called "We bounced Radio Signals off the MOON." <https://tinyurl.com/vk7hh-eme>



- P88 How's DX. Increased activities prior to December. What now.
- P90 World above 50MHz. Six metres has seen some local [Victorian activities recently and VK9QO has been reported in October 5 by Steve NN4X in his report. The Geminids meteor showers to peak 13-14 December and are good for 10 and 6 metres as they are a slower travelling than the Perseids.
- P98 Classic Radio, Affordable Transmitters and kits for the Novice Class operators, The year was 1952 and the introduction of the Novice licence certificate [in the United States] saw kits being offered for construction and operation at low cost for the new licensees. This article lists a number of these kits by alphabetical name and with an UNDER \$50 cost as criteria, Many kits were developed prior to 1952 and ex WW2 period, but the names are not very well known today. Still a part of the history and development of the novice licence.

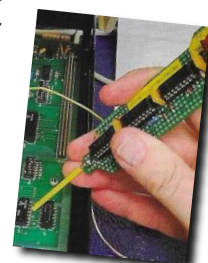
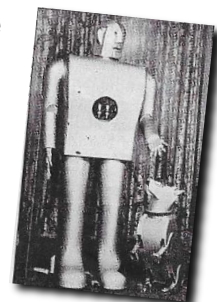


- P100 QST Index's from December for 1925, 1975 and+ 2000

And so, we come to the close of another year.
Merry Christmas to all
73 Craig VK3KG.

Silicon Chip Review November 2025

- P3 Publishers Letter. Nicholas Vinen. Looks and comments NXP and the electronics industry control from China.
- P10 Product Showcase. Electronex 2026 Sydney.
- P16 Humanoid & Android Robots. Part 2. David VK3DSM. Compares the looks and construction of robots through the years and the many companies making some very versatile and agile machines and the integration of AI.
- P30 Power Electronics. Part 2. Controlling DC-DC Converters. Using mathematical models and CAD to design efficient converters
- P41 RGB LED STAR. Nicholas Vinen. An 80 Neo-Pixel LED star, available as a kit, using a micro-controller to provide an array of patterns and effects, just what's needed for the top of the tree.
- P52 How To Design Printed Circuit Boards. Part 1. Tim Blythman. How to get started designing your PCB with a professional look, and these days, getting it professionally manufactured. What to use and how the PCB is made these days.
- P60 Earth Radio. Whispers in the sky. Part 1. John Clark. A receiver designed for ELF and VLF reception to listen to EMR from mother nature such as solar, atmospheric disturbances such as lighting and auroras. Description of the EMR and how to receive it. In this case a loop antenna and some basic analogue circuitry. Operates on 12V or 9V battery.
- P70 DCC Decoder for model locomotives. Tim Blythman. A way to control multiple model locomotives on the same track using digital commands sent over the track power supply. Another article for next month on other parts of DCC is being published.
- P79 Circuit Notebook. Pulse-Counting Logic Probe. 10A ammeter using a low cost DVM.
- P82 Digital Preamplifier and Crossover. Part 3. Phil Prosser. Continues with mounting the hardware and panel work and power supply.
- P90 Serviceman's Log. Dave Thompson. A one-man band, remote work, repairing shop signage, converting torches to wireless charging, tinkering with a guitar amplifier.
- P96 Vintage Electronics. The BC-221 US-Military Frequency Meter from 1941. Ian Batty. A classic bit of military equipment, used by many defence forces in various guises. Built for in the field use and using harmonics to generate the needed frequencies from a master oscillator it was constructed to take hard treatment in its travels.



<http://www.barg.org.au/wp-content/uploads/2024/07/BARG-Form-Membership-Application-Form-was-V3-Rev-PA11.pdf>

BARG Form - Membership Application Form (was V3) Rev PA11.docx

Ballarat Amateur Radio Group Inc
Registration Number A0006953T
ABN 44 247 200 143
Application for Club Membership



This completed document should be emailed to the Secretary at BARG@BARG.ORG.AU, or brought along to a face to face meeting.

Surname: _____ **Given Names:** _____

Callsign: _____

Are you a financial member of WIA?: Yes No

Partner's Name: _____

Residential Address: _____

Postcode: _____

PostalAddress: _____
(If different to above) **Postcode:** _____

Telephone;
(Work) _____ (Home) _____ (Mobile) _____

EmailAddress _____

Unless otherwise requested, Newsletters and Club information will be sent to your email address. If the Club decides to publish a Club Directory, are you willing to have the above information included? Please indicate: **Yes No**

By applying for membership I indicate my support of the purposes of the Association and agree to comply with the Association rules in effect.

Applicant's Signature: _____ **Date:** _____

Proposed By: _____ **Callsign:** _____ **Date:** _____

Seconded By: _____ **Callsign:** _____ **Date:** _____

--ooOoo--

Presented to Committee: _____ **Decision:** Accept / Reject

Fee Paid: \$ _____ **Date:** _____ **Receipt No(if applicable:)** _____

Entered into Membership Register: _____ **Secretary:** _____

BARG Form - Membership Application Form (was V3) Rev PA11.docx1 of 1